Description	PCI format PC board . 4 CAN channels . 2 LIN or ISO9141 channels
Protocol controller	. CAN : 4 SJA1000 . ISO9141/LIN : 1 x DUART 26C92
Line interface	. High speed CAN: 2 x PCA82C251 . Low speed CAN – fault tolerant : 3 x TJA1054 . ISO9141/LIN : Type pull-up, pull-down or LIN master / slave
Standby / wake-up	Managed by standby / wake-up signal software. Output (INH) to control external relay
I / O	2 x 0-12V inputs 4 open collector outputs
Timebase	1 ms clock
Connector	1 DB25 & 1 DB15
PC Interface	Bus PCI 33MHz
Dimensions	180 x 110 mm
Power supplies	+5V and +12V supplied by the PC or external battery
Storage temp.	-40 to +85°C
Operating temp.	0 to 70°C

OBJECTIVES :

The PCI-MUX-4C2L boards are products from the **EXXOTEST** range. These PCI format boards enable interfacing a PC type with a CAN high speed, CAN low speed - fault tolerant and ISO9141/LIN networks.

The boards have the following channels:
-   1 high speed CAN channel (ISO 11898 standard)
-   2 low speed CAN channels – *fault tolerant* with software control of the standby / wakeup signals and downgraded mode information feedback to the application
-   A high speed CAN or low speed CAN channel - *fault tolerant* configurable with the software.
This additional link can be used to obtain the following configurations:
    - 2 high speed CAN channels and 2 low speed CAN channels - fault tolerant
    - 1 high speed CAN channel and 3 low speed CAN channels
-   2 vehicle diagnostic channels (ISO 9141 standard) or LIN master and slave channel
-   2 digital inputs and 4 digital outputs
-   One ms time base

CHARACTERISTICS :

CAN link main characteristics
Protocol controller: PHILIPS SJA1000 (CAN 2.0B standard)
-   Identifier standard 11 bits and extended 29 bits
-   Data transmission / reception of up to 8 bytes
-   Remote transmission request (RTR)
-   Non intrusive mode (no acknowledge or error frame)
-   Reading of internal error counters and detailed information in case of bus error.

High speed line interface: PHILIPS PCA82C251 (ISO 11898–24V standard)
- Transmission rate up to 1 Mbits/sec
- Connection of up to 110 stations on the network
- Short-circuit to earth and battery >24V
- Adjustment of termination resistance between CANH and CANL by jumper
- Adjustment of signal slope with software (vertical or horizontal fronts).

Low speed line interface: PHILIPS TJA1054 (Fault tolerant CAN transceiver)
- Transmission rate up to 125 Kbit/sec
- Connection of up to 32 stations on the network
- Transmission in differential mode, can operate on 1 wire
- Detection and processing of downgraded modes (short-circuit and open circuit)
- Operating data feedback to application in downgraded mode (ERR)
- Standby / wake-up signals management (STB, EN, WAKE and INH), power relay control output (INH)

Main characteristics of the ISO 9141 / LIN link
- ISO 9141 standard
- Direct management of K and L lines
- Transmission rates (ISO9141) of 10400 bauds and 62.5 Kbauds
- Configuration in pull-up, pull-down mode or jumper tester (ISO9141)
- Configuration in master or slave mode by jumper (LIN)
- Transmission rates (LIN) of 2400, 9600, 19200 and 20833 kbit/s

SOFTWARE LIBRARY :

DLL-MUX-xxx: A software functions library which enables fast and simplified use of the different networks on the board. These functions are grouped together in a dynamic library (32-bit DLL) and are available for the Windows 95, 98, NT, ME and XP operating systems, offering the following features:
- Network configuration and transmission / reception functions.
- Access to several networks and boards simultaneously (identification of board position in the PC)
- Possible under certain conditions to date stamp messages transiting over the network.
- Calculation of bus load, statistics counters, application timer, downgraded modes...

For more details on the features of the functions and the different networks supported, see the DLL-MUX-xxx sales technical data sheets.

OPTIONS :

MUXTRACE-EXP: Multiplexed data analysis and graphics interpretation software.

ORDER REFERENCES :

References	Characteristics
PCI-MUX-4C2L	- PCI-MUX-4C2L board with 1 CAN high speed channel, 2 CAN low speed channels - fault tolerant, 1 software configurable CAN channel and 2 LIN / ISO9141 channels - DLL-MUX-CAN and DLL-MUX-LIN software library for *Windows 95, 98, NT, ME and XP*

www.exxotest.com

WARRANTY : 2 years Parts an Labour.

ANNECY ELECTRONIQUE

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